

REMARKS

This application has been carefully reviewed in view of the above-referenced Office Action, and reconsideration is requested in view of the following remarks. New claims 31-34 are submitted for the Examiner's consideration.

Regarding the Rejection under 35 U.S.C. §112

Claim 14 was rejected due to an inadvertent error in reciting the proper dependency. Claim 14 has been amended to depend from claim 16 as originally intended. Applicant regrets the inconvenience that this error no doubt caused and invites the Examiner to contact the undersigned for clarification should similar errors be noted in this action response or any other communication in this or any other case so as to expedite prosecution. Reconsideration and allowance are respectfully requested.

Regarding all Prior Art Rejections

By way of review, the prior Office Action presented no rejections to claim 19, indicated that the claim was allowable if rewritten in independent form and provided a statement of reason for allowance. Accordingly, claim 16 was amended to incorporate all limitations of claim 19 and any intervening claims. All remaining claims depend from claim 16 except for newly added claims 32 - 34.

The prior Office Action states "the best prior art found during examination of the present, Rakib et al. in view of Taylor et al., discloses a time slot and carrier allocation method, but fails to disclose the threshold number comprises approximately 50% of available carriers". (emphasis added)

The present action now rejects all claims including rewritten claim 19 which contains the above threshold feature – a feature not found in the newly cited art.

In *Graham v. John Deere Co. of Kansas City*, 383 U. S. 1 (1966), the Supreme Court set out a framework for applying the statutory language of §103, language itself based on the logic of

Application No.: 10/616,344

the earlier decision in *Hotchkiss v. Greenwood*, 11 How. 248 (1851), and its progeny. See 383 U.S., at 15–17. The analysis is objective:

“Under §103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background the obviousness or nonobviousness of the subject matter is determined. Such secondary considerations as commercial success, long felt but unsolved needs, failure of others, etc., might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented.” Id., at 17–18.

The undersigned additionally notes that per *In re Kahn*, 441 F. 3d 977, 988 (CA Fed. 2006), as explicitly endorsed by the Supreme Court states “[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness”). It is further noted that MPEP2141.02 clearly requires that the claim be considered as a whole. Such consideration requires that each and every claimed feature as well as its interconnection and relationship with the other features be considered in evaluation of the differences in the claim and the prior art as required in the Graham inquiries. In order to establish *prima facie* obviousness, it is the Patent Office’s burden to consider each of the claim features and their interconnection and interrelationship and provide an articulated reasoning with rational underpinning for the obviousness of both the combination of claim features and their interrelationship to establish *prima facie* obviousness. When these principles are applied, it is submitted that the Office Action fails to meet its burden of establishing *prima facie* obviousness in this application at least for the following reasons:

- 1) The prior action explicitly indicated that “the best prior art … fails to disclose the threshold number comprises approximately 50% of available carriers”. (emphasis added)

Application No.: 10/616,344

- 2) Newly cited prior art to Gitlin also fails to disclose the above threshold feature. The Office Action appears to cite Col. 4, lines 43-49, but no such disclosure can be found there. The undersigned has searched Gitlin and the other cited art and fails to find such a disclosure. Hence, each and every claim feature has not been identified in the prior art.
- 3) In view of the above, the rejections fail to consider each and every claim feature – a requirement in order to consider the claim as a whole and to determine the scope and content of the prior art and the differences between the prior art and the claims at issue as required by *Graham v. Deere, supra*.
- 4) In the absence of finding such claim features, the Office Action has further failed to provide any “articulated reasoning” whatsoever that accounts in any way for the missing claim feature per *In re Kahn, supra*.

All claims call for the 50% threshold feature that the prior Office Action indicates is reason for allowance of claim 16. But, the Office Action fails to identify this feature in the newly cited art and fails to account for its absence with any articulated reasoning. Hence, *prima facie* obviousness has not been established and all claims are believed allowable for at least the reasons submitted above.

In addition to the above, it is noted that all claims call for “determining from a tone map that first and second time slots are generally allocated to a first and a second receiver respectively; determining from the tone map that the first and second receivers are able to receive using a common set of carriers”. It is noted that in Applicant’s invention as claimed, Applicant takes advantage of existing tone maps that define the ability of a particular set of allocations as functional for a particular set of receivers. It is noted that in certain systems such as PLC communication systems, all frequencies that are normally available for a particular type of receiver may not be operative in a satisfactory manner for all receivers. Using the actions just described to determine that communication is possible with two receivers using a particular

Application No.: 10/616,344

common set of carriers, the claim calls for defining a new tone map for enabling communication with the two receivers.¹ The cited art fails to provide this teaching.

To contrast, in Gitlin, the frequencies are simply assigned to enable optimized bandwidth apparently without checking to see if a particular channel is actually usable by a particular receiver. Accordingly, the Gitlin reference fails to teach or suggest the claim functions. To reiterate, it is a requirement of MPEP2141.02 clearly requires that the claim be considered as a whole, and such consideration requires that each and every claimed feature as well as its interconnection and relationship with the other features be considered in evaluation of the differences in the claim and the prior art as required in the Graham inquiries. And again, there has been no articulated reasoning to account for the failure of Gitlin to provide the required teaching. In view of this shortcoming in the rejection, the Office Action further fails to establish *prima facie* obviousness. Reconsideration and allowance of all claims are respectfully requested.

Applicant makes no admission or concessions as to the accuracy of the Office Action's positions on any other matters and reserves the right to make other arguments at a later date if appropriate, but feels that the present arguments are more than adequate to address all rejections at present.

Interview Request

In view of this communication, all claims are now believed to be in condition for allowance and such is respectfully requested at an early date. If further matters remain to be resolved, the undersigned again respectfully requests the courtesy of an interview. The undersigned can be reached at the telephone number below.

¹ Note that two identical receivers that are theoretically able to receive using two identical sets of frequencies may not actually be able to do so in a particular environment (e.g. in a PLC environment). See application background.

Application No.: 10/616,344

Respectfully submitted,

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Application No.: 10/616,344

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